

L Number	Hits	Search Text	DB	Time stamp
3	3	<p>((encrypt\$4 OR scrambl\$4 OR encipher\$4 OR encypher\$4 OR mask\$4 OR opaque) NEAR4 (password\$1 OR (pass ADJ1 word\$1) OR passphrase\$1 OR (pass ADJ1 phrase\$1) OR PIN\$1)</p> <p>WITH (graph\$4 OR imag\$4 OR photograph\$3 OR pictur\$4))</p> <p>AND</p> <p>((decrypt\$4 OR descrambl\$4 OR unscrambl\$4 OR decipher\$4 OR decypher\$4 OR uncover\$4 OR construct\$4 OR reconstruct\$4 OR restor\$5) NEAR4 (password\$1 OR (pass ADJ1 word\$1) OR passphrase\$1 OR (pass ADJ1 phrase\$1) OR PIN\$1)</p> <p>WITH (graph\$4 OR imag\$4 OR photograph\$3 OR pictur\$4))</p>	EPO; JPO; DERWENT	2002/09/23 15:20

PAT-NO: WO009705578A1

DOCUMENT-IDENTIFIER: WO 9705578 A1

TITLE: METHOD AND APPARATUS FOR SECURELY HANDLING A  
PERSONAL IDENTIFICATION  
NUMBER OR CRYPTOGRAPHIC KEY USING BIOMETRIC TECHNIQUES

PUBN-DATE: February 13, 1997

INVENTOR-INFORMATION:

NAME

TOMKO, GEORGE J

STOIANOV, ALEXEI

COUNTRY

N/A

N/A

ASSIGNEE-INFORMATION:

NAME

MYTEC TECHNOLOGIES INC

COUNTRY

CA

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INT-CL (IPC): G07C009/00;G07F007/10 ;H04L009/08

EUR-CL (EPC): G07C009/00 ; H04L009/08

ABSTRACT:

A method and apparatus using biometric information (such as a fingerprint, an iris structure, etc.) as a cipher for encrypting and decrypting a personal identification number (PIN) which is used as an input to a PIN requiring device. The method of encryption of a PIN includes generating a sequence of random characters representing a PIN to be encrypted; obtaining a generating function such that the random characters are coefficients in an expansion of a

square of said generating function over basis functions;  
and dividing a  
transform of the generating function by Fourier transformed  
information image  
signal to obtain the encrypted PIN. The latter is stored  
digitally in a  
personal card or a database. To decrypt the PIN, a  
full-complex spatial light  
modulator is illuminated with an optical beam carrying the  
Fourier transform of  
the biometric image of an individual to be identified. The  
encrypted PIN may  
be also stored in a reflective hologram which is  
nondestructively attached to a  
personal card, and the decryption of a PIN comprises  
illuminating the hologram  
with the beam carrying the Fourier transform of the  
biometric image. In other  
embodiments of the invention, a cipher is derived from an  
intensity  
distribution (captured directly by a camera) of the Fourier  
spectrum of the  
biometric image. The PIN may be encrypted and decrypted  
either optically (with  
phase conjugation techniques) or digitally (using a block  
encrypting  
algorithm).

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1	25	((encrypt\$4 OR scrambl\$4 OR encipher\$4 OR encypher\$4 OR mask\$4 OR opaque) NEAR4 (password\$1 OR (pass ADJ1 word\$1) OR passphrase\$1 OR (pass ADJ1 phrase\$1))  WITH (graph\$4 OR imag\$4 OR photograph\$3 OR pictur\$4))	USPAT	2002/09/23 15:06

US-PAT-NO: 5812278

DOCUMENT-IDENTIFIER: US 5812278 A

TITLE: Image communicating method, facsimile type  
electronic mail apparatus  
and facsimile apparatus

----- KWIC -----

FIG. 16 shows a procedure for forming a cipher key in  
dependence on image data  
obtained from a manuscript and enciphering a pass-word by  
using the cipher key;

FIG. 16 shows a procedure for forming a cipher key in  
dependence on image data  
obtained from a manuscript and enciphering a pass-word by  
using the cipher key.